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COMMITTEE ON THE PEACEFUL
USES OF OUTER SPACE

QUESTIONNAIRE ON POSSIBLE LEGAL ISSUES WITH REGARD TO AEROSPACE OBJECTS: REPLIES FROM MEMBER STATES

Note by the Secretariat

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*Replies received from Chile, Greece, Kazakstan, Syrian Arab Republic, Turkey and the United Kingdom of Great Britain and Northern Ireland.

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INTRODUCTION

1. At its thirty-eighth session, the Committee on the Peaceful Uses of Outer Space noted that, at the thirty-fourth session of its Legal Subcommittee, the working group of the Subcommittee on agenda item 4, on matters relating to the definition and delimitation of outer space and to the character and utilization of the geostationary orbit, had finalized the text of a questionnaire on possible legal issues with regard to aerospace objects. The Committee agreed with the Legal Subcommittee (A/AC.105/607 and Corr.1, para. 38) that the purpose of the questionnaire was to seek the preliminary views of States members of the Committee on various issues relating to aerospace objects. The Committee also agreed that the replies to the questionnaire could provide a basis for the Legal Subcommittee to decide how it might continue its consideration of agenda item 4. The Committee further agreed with the Subcommittee that States members of the Committee should be invited to give their opinions on those matters.[1]

2. The Secretary-General addressed a note verbale dated 21 August 1995 to all Member States of the Committee inviting them to communicate to the Secretariat the information requested above in order for the Secretariat to prepare a report containing the information for submission to the Legal Subcommittee.

3. Information received from Member States by 15 February 1996 is contained in document A/AC.105/635, and information received by 15 March 1996 is contained in A/AC.105/635/Add.1. Information received by 18 March 1996 is contained in A/AC.105/635/Add.2.

4. At its thirty-ninth session, the Committee agreed with the recommendations of the working group on agenda item 4, endorsed by the Legal Subcommittee at its thirty-fifth session (A/AC.105/639, para. 39), that the Secretariat should encourage those States members of the Committee that wished to submit replies to the questionnaire to do so as early as possible.[2]

5. In reply to a note verbale from the Secretary-General dated 16 July 1996, the present document was prepared by the Secretariat on the basis of information received from Member States by 30 November 1996.

REPLIES RECEIVED FROM MEMBER STATES*

Question 1: Can an aerospace object be defined as an object which is capable both of travelling through outer space and of using its aerodynamic properties to remain in airspace for a certain period of time?

Chile

In general, we agree with the suggested definition of an aerospace object, in so far as the aerospace object is performing a space mission.

Greece

Yes. Accordingly, in order to underline the primary function of aerospace objects, consisting to serve space activities, it seems necessary to complete the proposed definition by adding to its end the following phrase: "... [*to remain in airspace for a certain period of time*] ***for [primarily] [exclusively] space purposes***".

Kazakstan

Yes, an aerospace object can be defined in this way.

Syrian Arab Republic

Yes.

Turkey

An aerospace object may also be able to "stand still" at certain special and strategically important positions like the Lagrangian points of any "binary" celestial system like Earth-Moon or Earth-Sun without any energy expenditure. Therefore, a definition should also include the words "or staying in" after the words "travelling through ...".

"Flights" in the atmosphere of other planets which may take place in the near future should not be excluded here, and special precautions for such flights may need to be considered. (On the other hand, not all "objects" could be capable of flying in an atmosphere. Therefore, a definition for a "space-only objects" (space craft?) class should also be given.)

On the other hand, the definition of an "aerospace object" has yet to be developed to reach a consensus. This concept should be first defined scientifically before a legal definition is accepted.

Question 2: Does the regime applicable to the flight of aerospace objects differ according to whether it is located in airspace or outer space?

Chile

We consider that there should be no distinctions made in the regime applicable to the flight of aerospace objects where the mission performed is a space mission. In any case, in this regard, it would be more useful to formulate provisions on the innocent passage of a space object over national airspace.

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*The replies are reproduced in the form in which they were received.

Greece

No, there is no reason to differentiate the legal regime of the flight of aerospace objects *ratione loci.* In fact, the overall flight of aerospace objects should be submitted to a sole legal regime, exactly to avoid unnecessary dualism (more or less justified in the case of the territorial and open sea because of the very low speed of ships and other similar factors), which undoubtedly produce confusion and malfunction of the whole legal system governing space activities

Kazakstan

Yes, such a distinction should be made.

Syrian Arab Republic

Yes.

Turkey

The regime applicable to aerospace objects whether they are located in airspace or in outer space should differ since there are important differences in physical constraints and physical laws that apply in each medium. Especially landing conditions of aerospace objects need to be defined in detail.

We also should not forget that, other than aerospace objects, "space-only objects", in the same context, should be separately defined as mentioned in answer 1. These latter objects may be under the same legal consideration as aerospace objects in outer space.

Question 3: Are there special procedures for aerospace objects, considering the diversity of their functional characteristics, the aerodynamic properties and space technologies used, and their design features, or should a single or unified regime be developed for such objects?

Chile

In our view, a uniform regime applicable to space objects will always be preferable.

Greece

No, there are no special procedures based on these factors. On the contrary, in view of the above (Question 2), it is necessary to adopt a single or unified legal regime for aerospace objects, exactly to make their use less complicated.

Kazakstan

Aerospace objects should be differentiated from each other according to their characteristics.

Syrian Arab Republic

Single or multiple regimes should be developed to cover all aspects involved.

Turkey

If the concept of "aerospace objects" is not extended to include the proposed "space-only objects" (i.e. object with all the capabilities of aerospace objects, but not capable of flying in airspace), a regime probably

similar to aerospace objects could be considered. However, since special arrangements regulating the diversity of such objects do not exist in the applicable international law and considering probable future technological developments in this area, a single and unified regime does not seem legally necessary at this stage.

Question 4: Are aerospace objects while in airspace considered as aircraft, and while in outer space as spacecraft, with all the legal consequences that follow therefrom, or does either air law or space law prevail during the flight of an aerospace craft, depending on the destination of such a flight?

Chile

We consider that, in view of the diversity of missions and legislation applicable to each case, it is advisable that only one type of law prevail, depending on the destination of the particular flight.

Greece

Space law should prevail in the overall flight of aerospace objects; if they are destined to serve primarily outer space activities, *i.e.* all their flight phases from their launching from Earth to orbiting in outer space or landing on any other celestial body or space platform and, *vice versa*, to their return back to Earth. Of course, it is self-evident that all air law rules concerning safety of air navigation should also be jointly applicable.

Kazakstan

The law applicable to the type of space in which the aerospace object is located should prevail.

Syrian Arab Republic

It can be argued that the criterion to be applied in determining whether an aerospace object comes within the jurisdiction of international space law or that of international air law is the purpose of the object's flight. As aerospace technology becomes increasingly sophisticated, the question might arise as to whether the existing provisions of international space and air law need to be supplemented.

Turkey

Aerospace objects in airspace should not be considered as aircraft since special conditions will always apply to their design, manoeuvre and landing procedures. Existing international aviation rules as well as national legislation and air traffic arrangements should be taken into account.

Question 5: Are the take-off and landing phases specially distinguished in the regime for an aerospace object as involving a different degree of regulation from entry into airspace from outer space orbit and subsequent return to that orbit?

Chile

Although there are no provisions currently in effect which specifically regulate aerospace flights at the stage of entry into national airspace, we feel that in the interests of the uniformity of the relevant legislation one should stay with the mission of the aerospace object and regulate the latter's innocent passage only.

Greece

No, there is no reason to separate and distinguish these two flight phases of aerospace objects from their other flight phases, and submit them to another legal regime, because, as explained above (Question 4), their overall flight is governed by space law.

Kazakstan

Yes, such a distinction should be made.

Syrian Arab Republic

At the present time the practical approach to tackling the problem of establishing such a distinction entails elaborating appropriate criteria and mechanisms for regulating these aspects of the regime governing aerospace objects and subsequently codifying them in norms of international law.

Turkey

Take-off and landing phases of aerospace objects will include many of the precautions of existing air traffic regulations. However, there may be special requirements different in the take-off and in landing from the existing rules.

Question 6: Are the norms of national and international air law applicable to an aerospace object of one State while it is in the airspace of another State?

Chile

One should stay with the nature of the mission. If it is a space mission, the norms of air law should not apply to its outgoing and return flight paths. On the other hand, if the same spacecraft overshoots and flies over airspace outside its outgoing and return flight paths, then it should no longer be covered by space law.

Greece

Aerospace objects as submitted to space law should be treated as spacecraft while in the airspace either of the launching State (as defined in Article I of the Convention on Registration of Objects Launched into Outer Space), the (normal or accidental) landing State or any other third State. The registration by a State in its appropriate registries of any flying object as an aircraft or a spacecraft is the formal criterion for the application to it of its respective national and international air or space law rules. Nevertheless, in both cases, air law norms concerning safety of air navigation should be applicable.

Kazakstan

Yes, those norms are applicable.

Syrian Arab Republic

When an aerospace object is located in the territorial airspace of another State, it may be subject to international air law as well as to relevant domestic air law by reason of national security or aerial safety as long as it has characteristics both of an aeroplane which is subject to air law and a space object which is subject to space law.

Turkey

Any object in the air space of a State needs to comply with the International Civil Aviation Convention (ICAC). If need for changes arises by practice, changes in the ICAC may then be considered. (Consultation with ICAC experts may prove useful). On the other hand, when such an object is within the airspace of a State, national legal norms could be applicable.

Question 7: Are there precedents with respect to the passage of aerospace objects after re-entry into the Earth's atmosphere and does international customary law exist with respect to such passage?

Chile

There are indeed precedents relating to aerospace objects, such as space shuttles, in respect of their aerodynamic characteristics. Similarly, customary law does exist with respect to such aerospace objects, whereby they are regarded as craft performing a space mission to which the norms of air law do not apply.

Greece

In our view, re-entries into Earth's atmosphere of all United States Space Shuttles, which were successively flown above the national airspace of many third States, may be considered as precedents of a kind of innocent passage. Thus, due to the fact that no objection or opposition was raised by these States, it follows that an international customary law right was then created with respect to such passage, as it happened earlier in the case of the first artificial Earth satellite.

Kazakstan

Yes, there are precedents for such passage involving space objects of the Russian Federation. Such passage was provided for under the Agreement between the Russian Federation and the Republic of Kazakstan of 28 March 1994 on the Main Principles and Conditions for Utilization of the Baikonur Launch Site.

Syrian Arab Republic

No specific international customary law exists, with respect to such passage of aerospace objects over foreign territories. No such precedents are traced with respect to Syria.

Turkey

There are a number of incidents where fragments of space objects have fallen onto "unwelcomed" territories. However, to our knowledge there are no well-defined international practices in such cases. Some regulations need to be established.

Question 8: Are there any national and/or international legal norms with respect to the passage of space objects after re-entry into the Earth's atmosphere?

Chile

At the present time, in view of the recent development of the aerospace object system, there are no specific norms applicable to such objects in either national or international law. However, as far as the development of space activity is concerned, the norms applicable to such objects should be those space treaties currently in effect.

Greece

No such information is available.

Kazakstan

Such norms are contained in the Act of the Republic of Kazakstan on Space Activity currently being drafted. Norms of this kind also appear in international space agreements.

Syrian Arab Republic

Present national and international legal norms should apply with respect to space and aerospace objects after re-entry into Earth's atmosphere.

Turkey

As far as the relevant articles of the Turkish Civil Aviation Code and some national practices are considered, space objects in airspace are under the same rules as aircraft and other flying objects. (Aviation traffic experts have to be consulted for more detailed and precise answers). The relevant United Nations Treaties and Principles relating to various aspects of the issue should also be considered.

Question 9: Are the rules concerning the registration of objects launched into outer space applicable to aerospace objects ?

Chile

Aerospace objects should be subject to the Convention on Registration of Objects Launched into Outer Space, which should be applied in this regard.

Greece

Yes, because, exactly, the responsibility and liability of the launching state is founded on this registration.

Kazakstan

Such rules are defined in the international Convention on Registration of Objects Launched into Outer Space.

Syrian Arab Republic

Yes, this is possible and necessary, since some such objects will in future operate regularly as space and air objects.

Turkey

All aerospace objects should be registered as "spacecraft" and also as "aircraft". However, the registration of space transportation objects that will be assembled in space and will never land on Earth (i.e. manufactured at the Space Station and other similar space platforms) starting their travels from and to such platforms practically never making an aerial flight, should also be registered and their routes and destinations should be declared for avoiding any incidents.

General Responses

United Kingdom of Great Britain and Northern Ireland

The Government of the United Kingdom acknowledges the importance of the subject and the future possible implications of considering legal issues in this area of aerospace objects, but regrets to inform the Secretary-General that the questionnaire is still under active discussion in both national and European contexts. The matter will be kept under close review and an agreed response to the questionnaire will be forwarded to the Committee on the Peaceful Uses of Outer Space in due course.

Notes

[1]See *Official Records of the General Assembly, Fiftieth Session, Supplement No. 20* (A/50/20), para. 117.

[2]See *Official Records of the General Assembly, Fifty-first Session, Supplement No. 20* (A/51/20), para. 128.